

2009 MUTCD Signing Updates

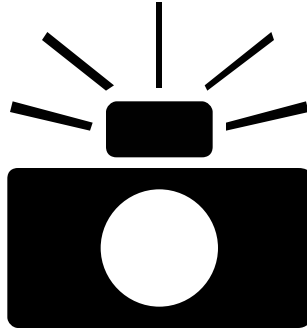
Ayman Alqudwah, PE
Signing Contracts Engineer

General Revisions to Part 2 – Signs

Engineer does not need to be involved in decisions for each sign at each location

- **Removing recommendation from several places in Part 2 that “signs should only be used where justified by engineering studies or engineering judgment”**

Many new symbols



Symbols from one type of sign shall not be used on a different type of sign



Warning sign symbol -
playground



Cultural/recreational
guide sign symbol -
playground

Size of sign lettering should be based on 1 inch of letter height per 30 feet of legibility

- **Based on 20/40 vision**
- **Currently 1 inch per 40 feet**

New and revised sign size tables

- Updated/expanded table for regulatory sign sizes
- New detailed sign size tables:
 - Warning signs
 - Conventional road guide signs
 - Freeway/expressway guide signs
 - General service signs
 - General information signs



**Option to use
all upper-case letters
for place names and
street names is being
deleted**



New option for the use of fluorescent colors



Fluorescent Yellow

Standard Yellow

New options for sign conspicuity enhancement



Revisions to Chapter 2B – Regulatory Signs

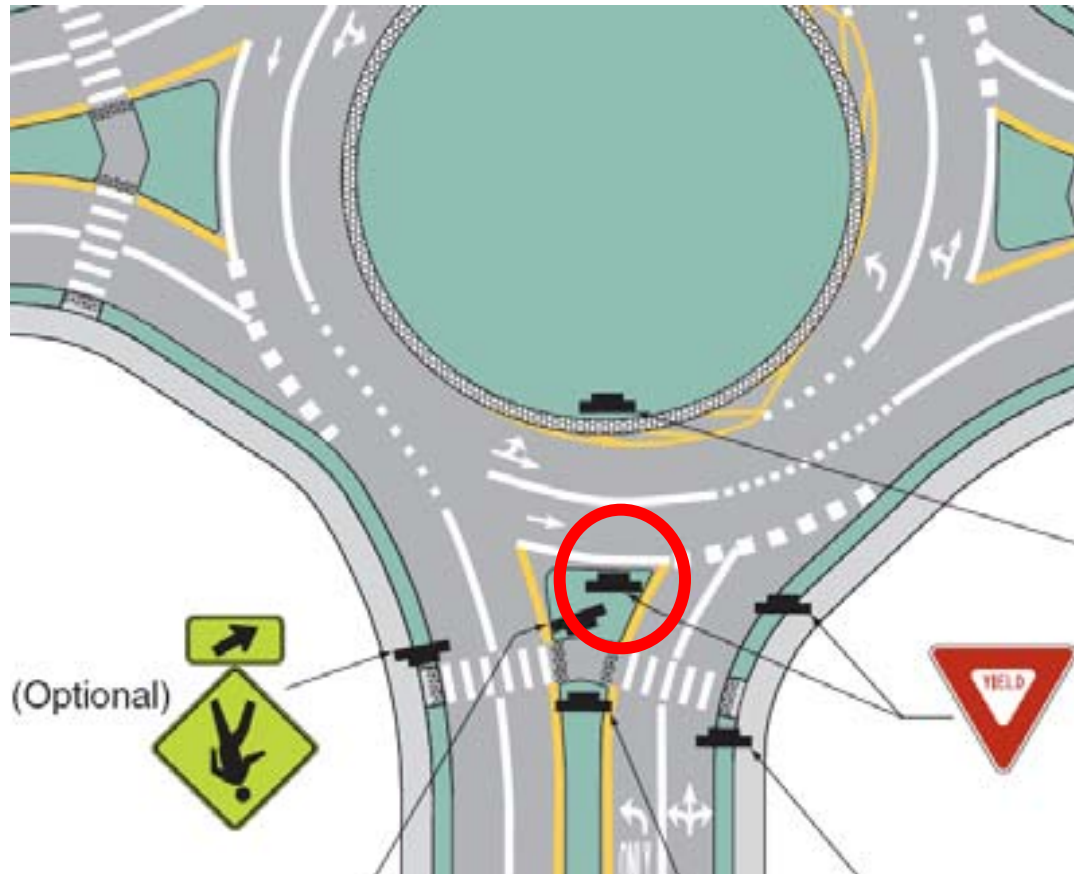
Larger minimum sizes for certain signs on multi-lane roads



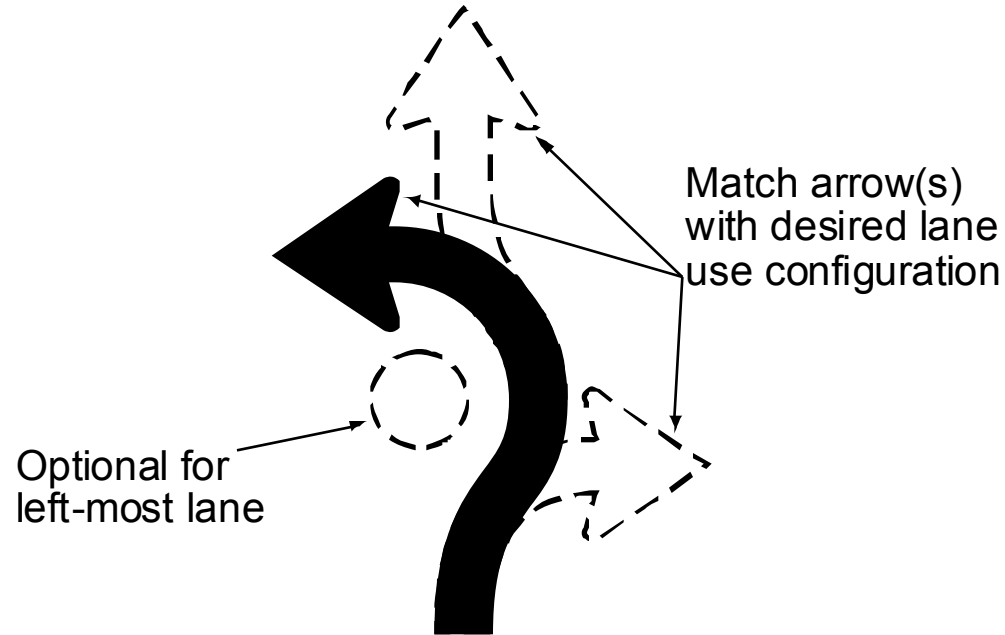
New recommendations on the factors to be considered when establishing STOP or YIELD sign control



Supplemental YIELD sign on the left-hand side of a multi-lane approach to roundabout --revised from requirement to recommendation



New optional fish-hook arrows for use on lane-use control signs at roundabouts



OR



OR



OR





**Use of 2-WAY,
3-WAY, and
4-WAY plaques
is being deleted**

**ALL-WAY plaque
remains as a
“shall” if all
approaches have
STOP sign**

Placing two STOP signs or two YIELD signs on the same post for emphasis will be prohibited



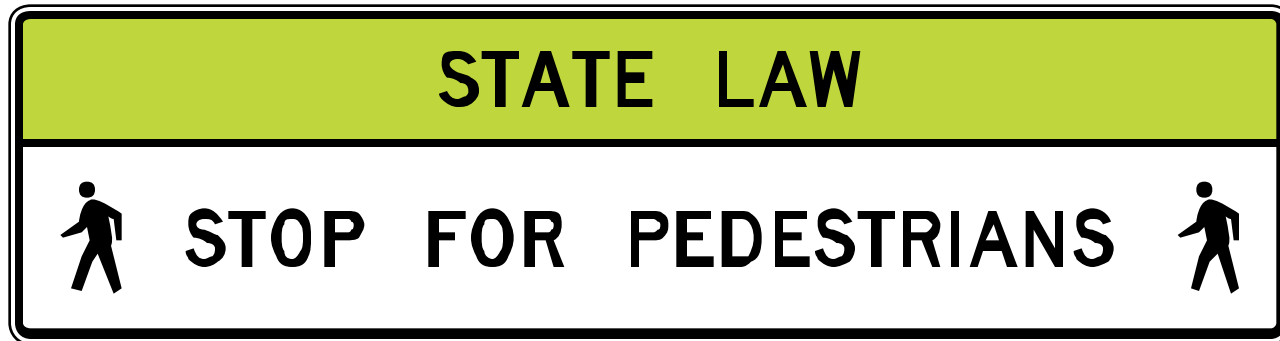
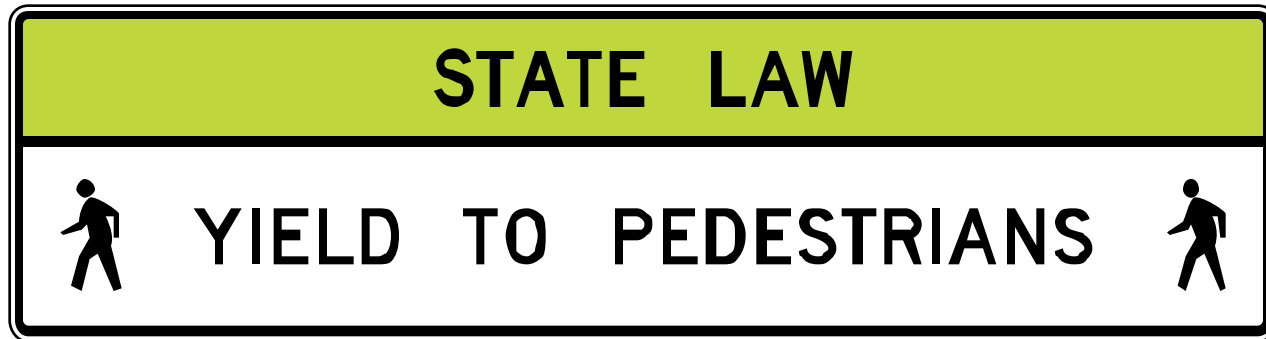
Signs mounted back-to-back with STOP or YIELD signs should stay within the edges



Variant of “Yield Here to Pedestrians” signs for State laws requiring full stop

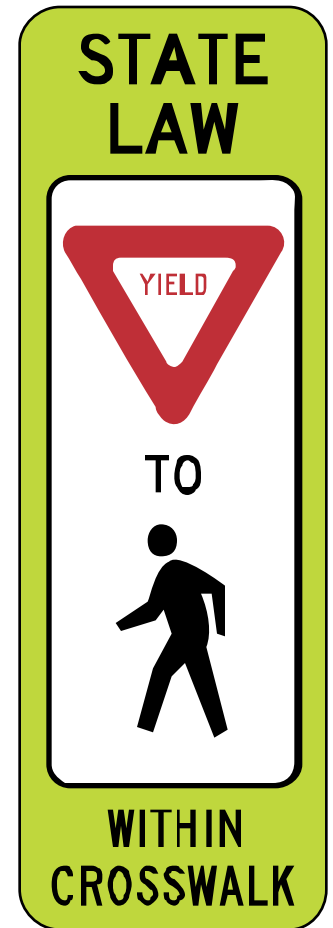


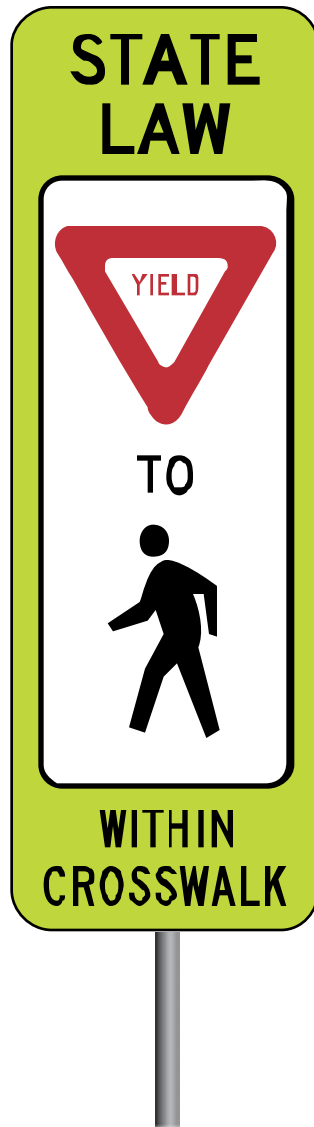
Overhead Pedestrian Crossing signs



In-street pedestrian crossing signs:

- Conditions and criteria for use
- Placement locations
- Background may be fluorescent yellow or fluorescent yellow-green





**Supports for in-street
pedestrian crossing
signs must be
designed to bend
over and bounce
back when struck**

**New plaques
that may be
mounted with
Speed Limit
signs**

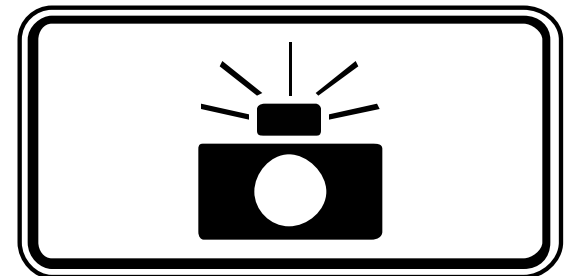
CITYWIDE

NEIGHBORHOOD

RESIDENTIAL

**UNLESS
OTHERWISE
POSTED**

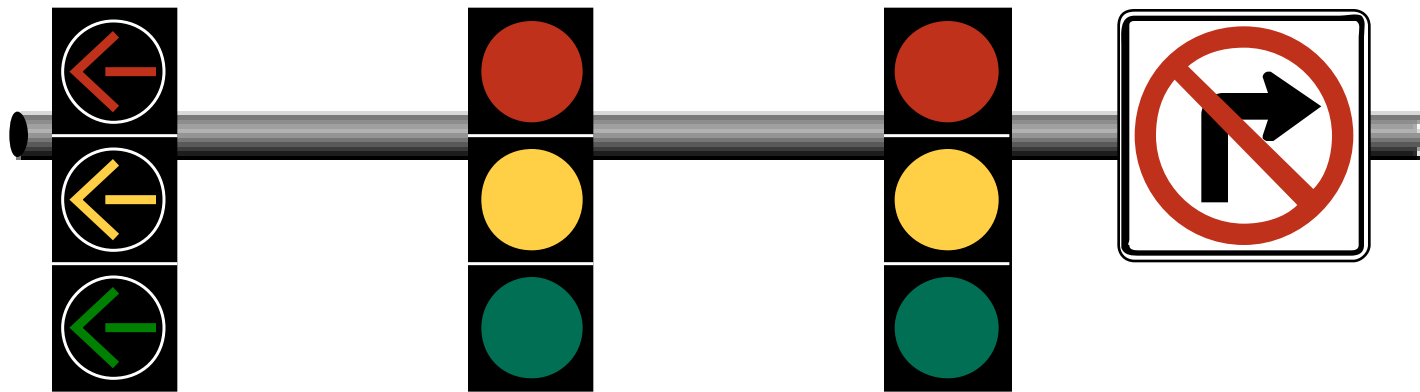
New symbolic photo enforced sign and plaque



New No Straight Through symbol sign

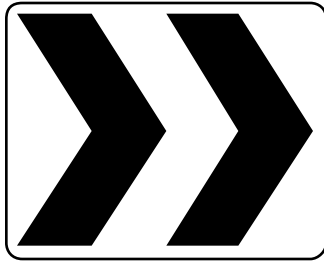


**Movement prohibition signs at
signalized intersections should be
placed adjacent to the appropriate
signal face(s).**

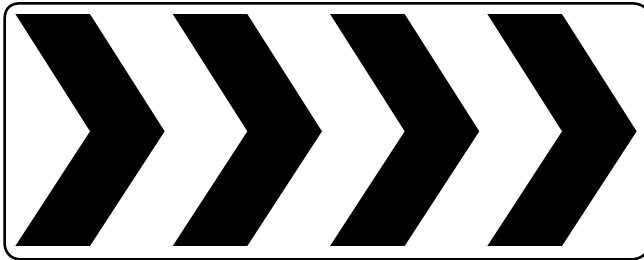
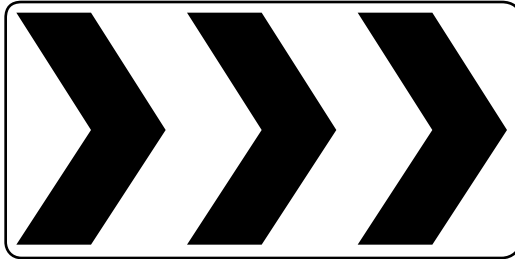


These signs shall not be used at a roundabout to prohibit turning left into the circular roadway

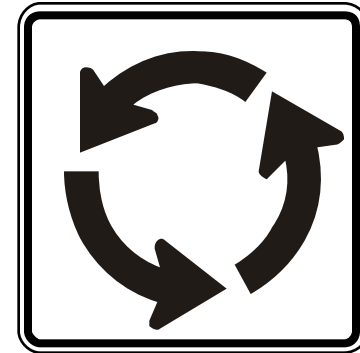




New regulatory signs for use at roundabouts

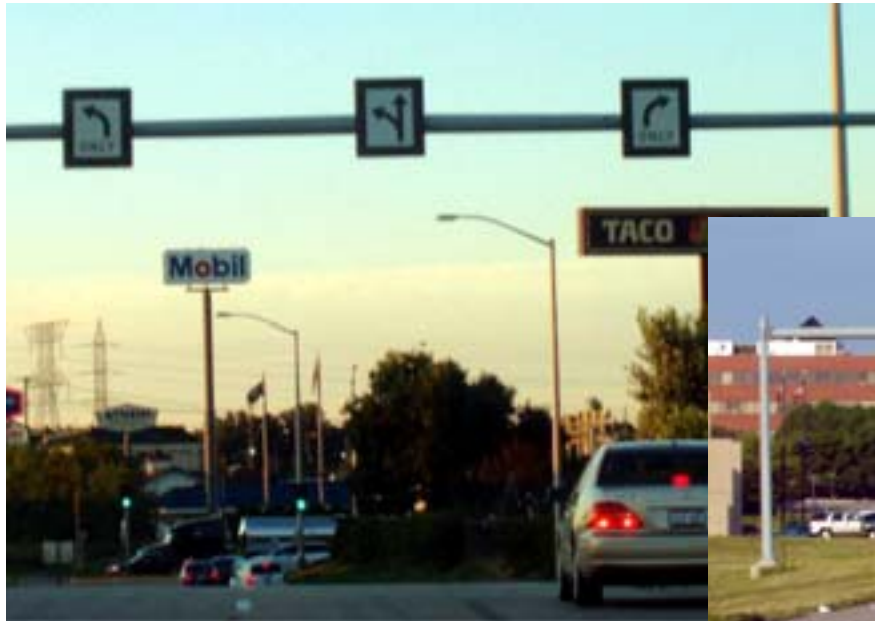


Roundabout Directional
Arrow signs
(on central island)



Roundabout Circulation
sign (with YIELD sign at
mini-roundabouts)

Overhead lane-use control signs should be used on signalized approaches for certain conditions



Lane-Use Control Signs for approaches with 3 or more lanes available to thru traffic

Advance Intersection Lane-Use Control signs, if used, shall not be mounted overhead



Mandatory Movement and Optional Movement Lane-Use Control signs, if used, shall be mounted overhead

New optional signs for enforcement of start of turn lanes



**Freeway lane
drops --
new regulatory
sign to
complement
“Exit Only”
warning panels
on guide signs**



New plaque for preferential lanes



Bus preferential lane signs





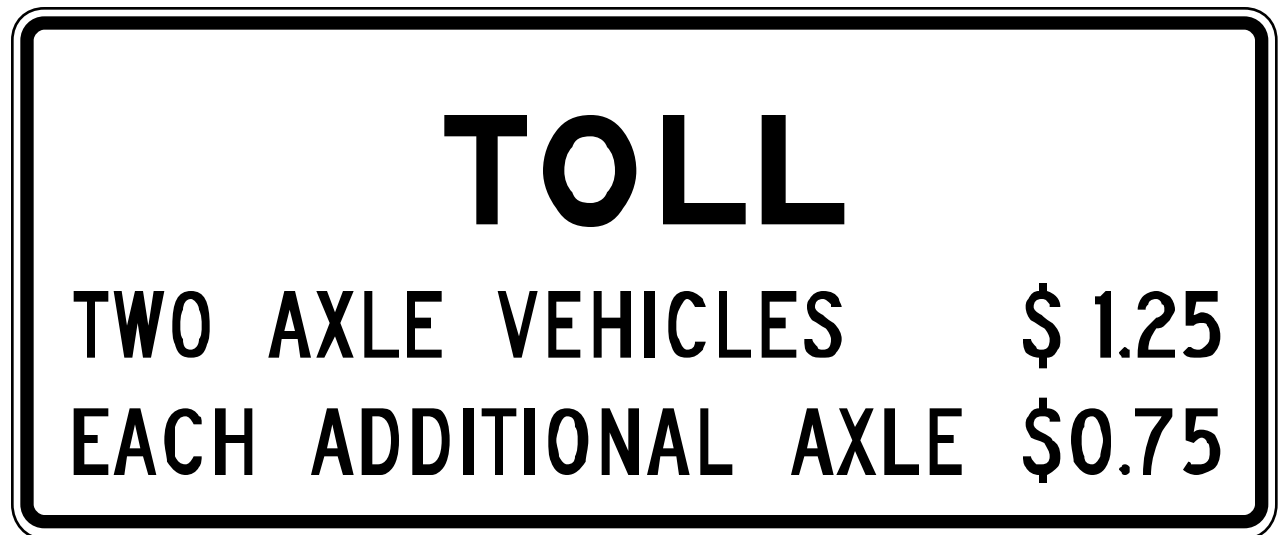
**New signs for
contiguous HOV lanes
that become general
purpose lanes**



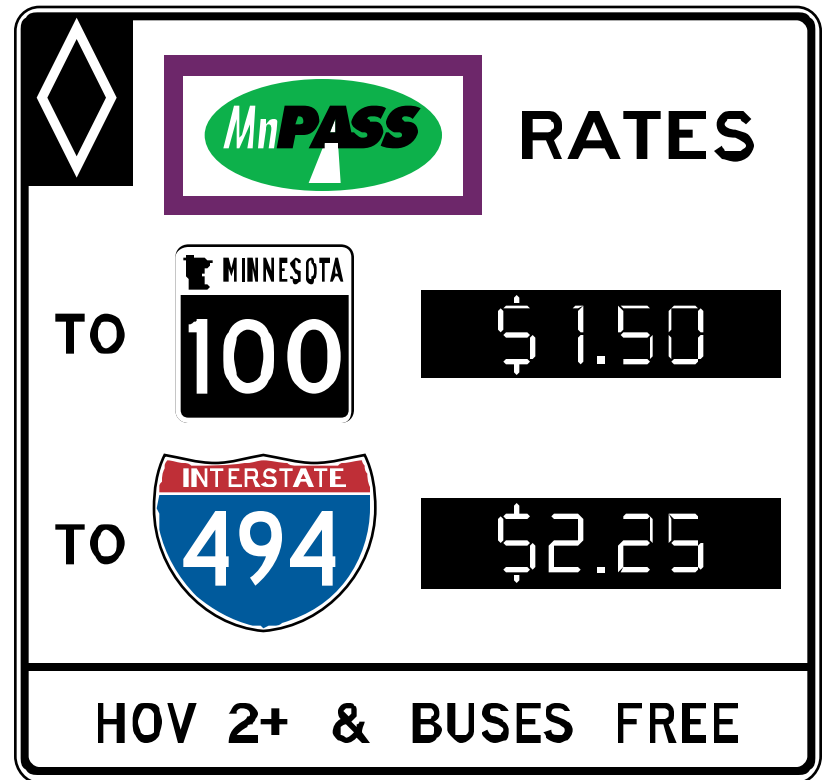
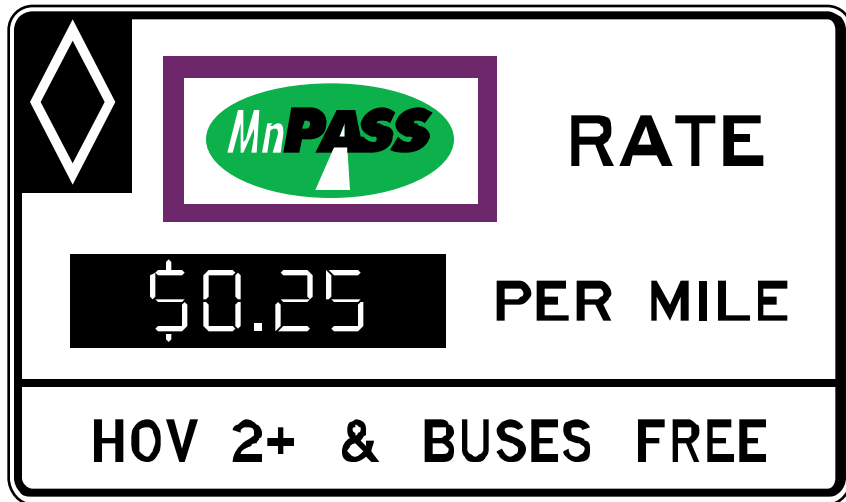


**New regulatory signs for lanes
restricted to ETC only**

New regulatory signs for toll plazas



New signs for managed lanes with variable toll rates



New regulatory signs for jughandles



ALL TURNS
FROM
RIGHT LANE

U TURN
FROM
RIGHT LANE

U TURN ↗

ALL TURNS ↗

↑ U TURN

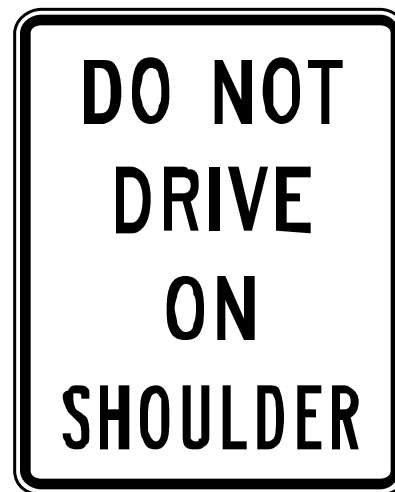
↑ U AND LEFT
TURNS

U AND LEFT
TURNS ↗

New symbolic design for Do Not Pass sign



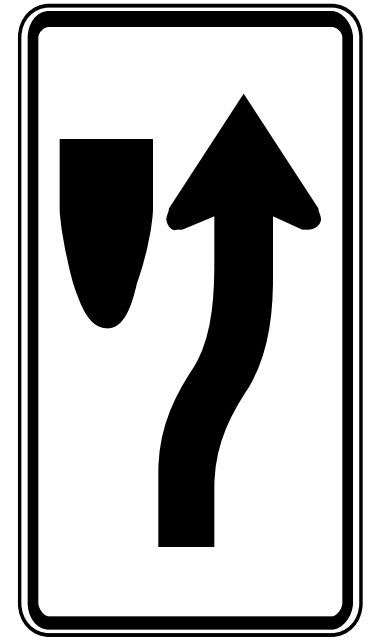
New regulatory signs



This regulatory sign deleted and replaced with a guide sign design



New narrow Keep Right sign for narrow median noses



Slow vehicle turn-out regulatory signs



Option for lower mounting height for Do Not Enter and Wrong Way signs on ramps





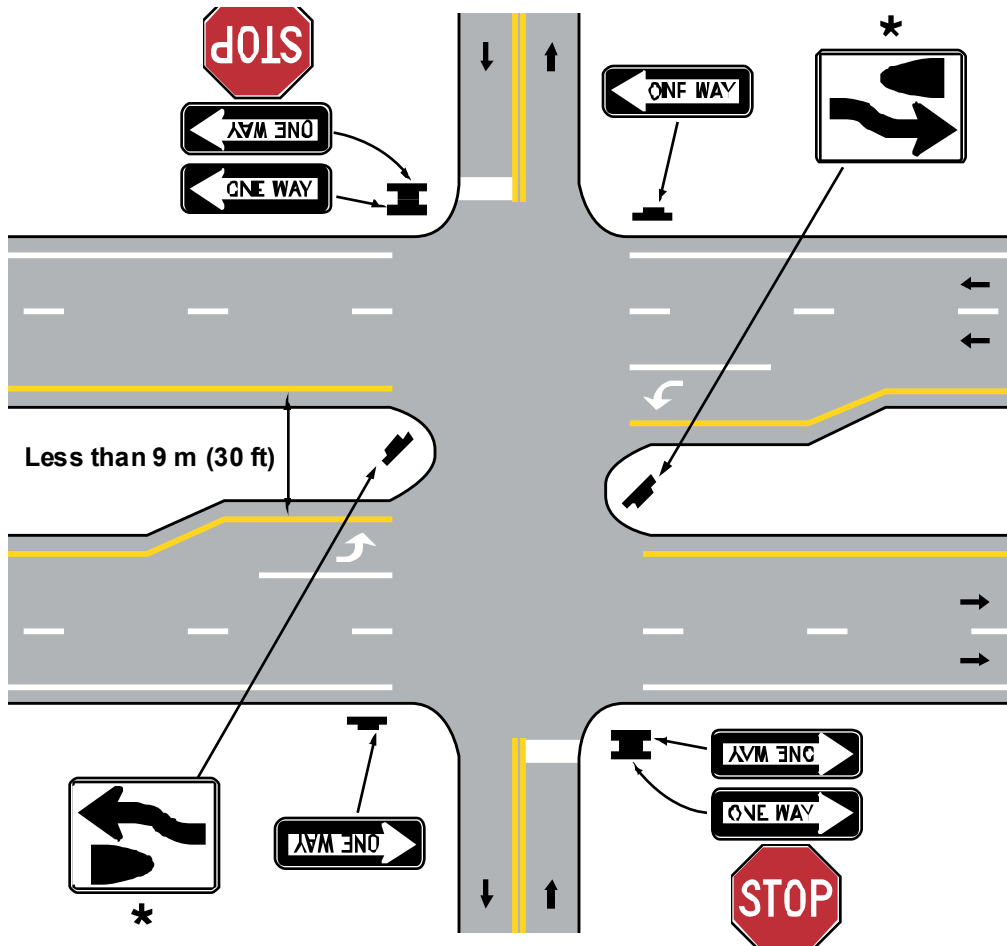
**“Excluded”
and
“prohibited”
changed to
“NO”**



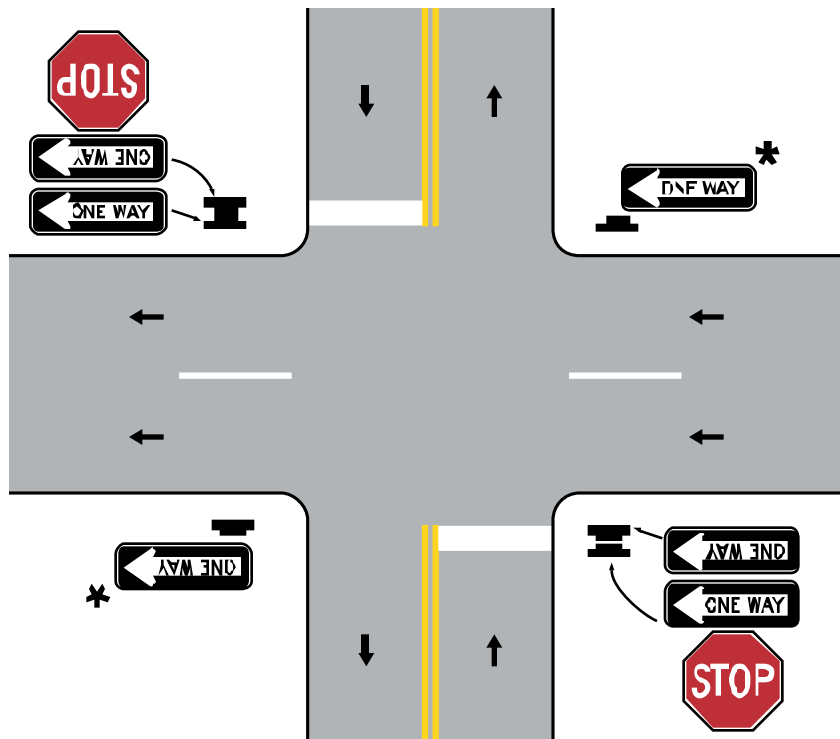
Regulatory signs for crossovers



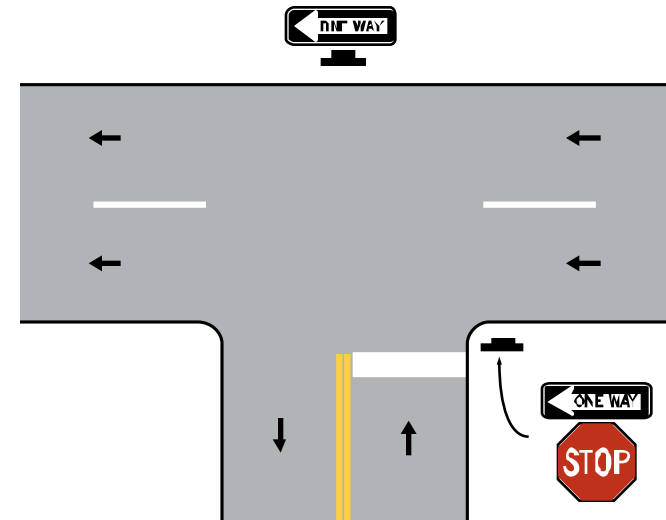
**One-way
signs
required on
near right,
far left, and
far right
corners of
divided
highways**



Near side and far side One-way signs required on the minor-street approaches at 4-way and T-intersections



Legend
* Optional
→ Direction of travel

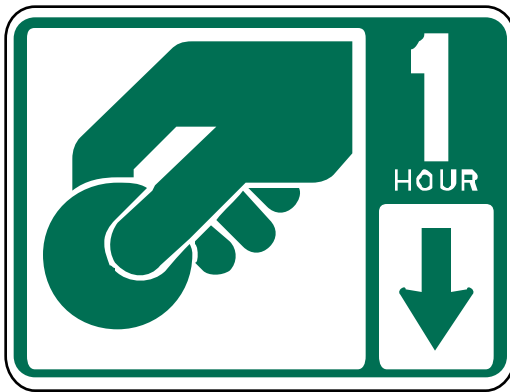




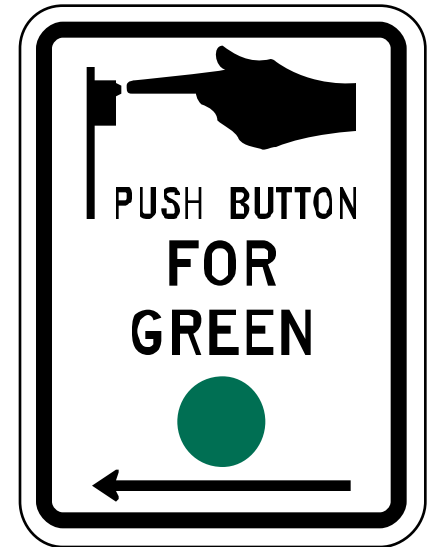
**Divided
Highway
signs shall be
installed on
approaches to
divided
highways**



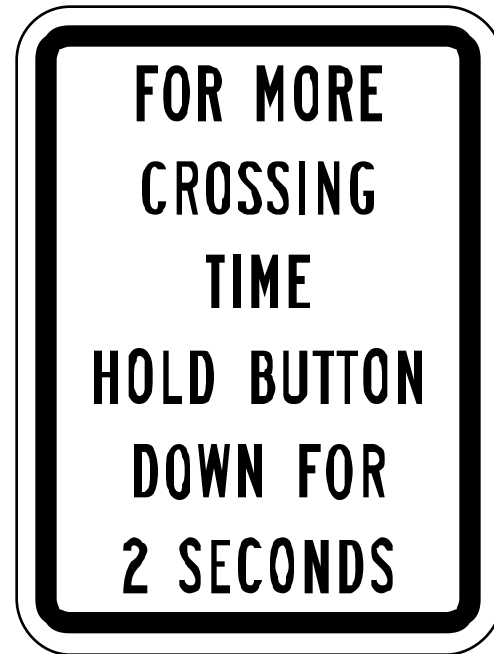
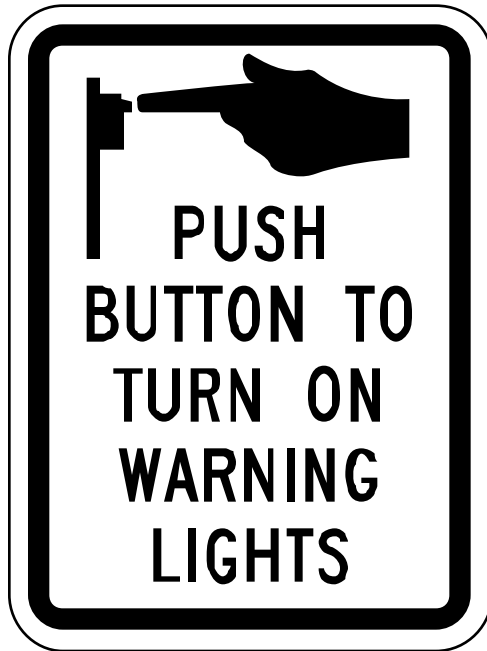
New pay parking and pay station signs



**Symbol is
being added
to pedestrian
pushbutton
signs**



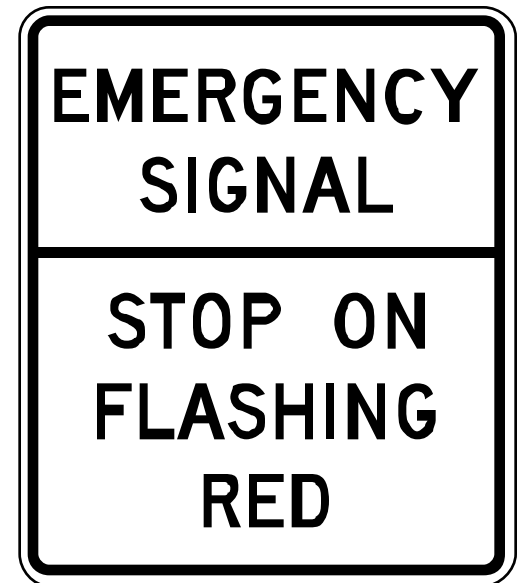
New special purpose pedestrian pushbutton signs

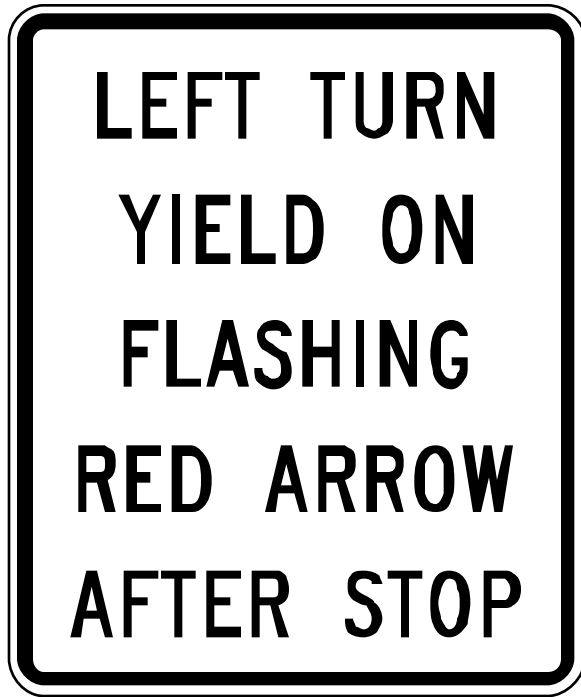


New supplemental plaque for regulatory signs



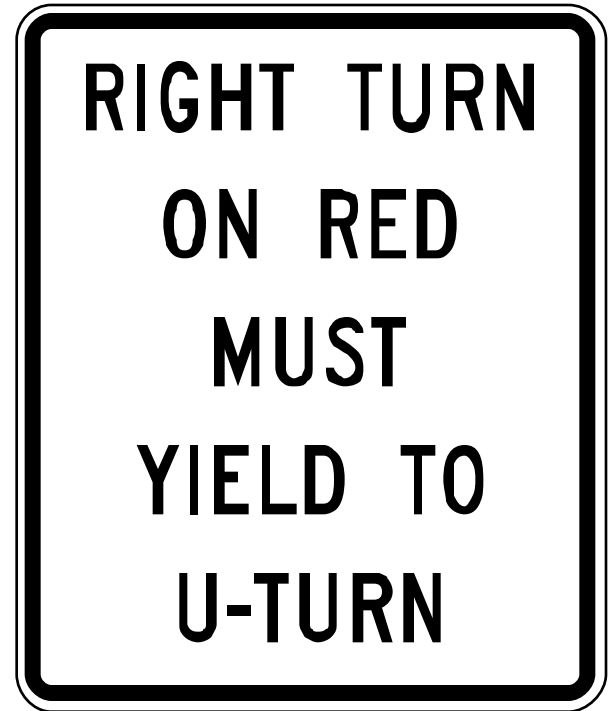
Required for use with emergency-vehicle hybrid signals

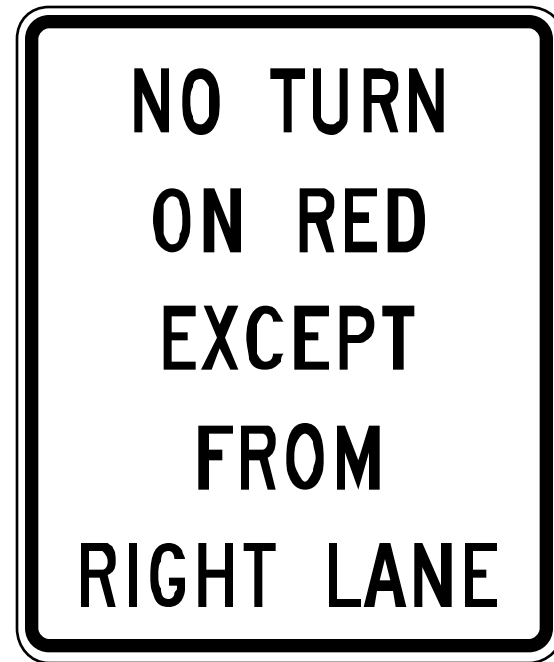




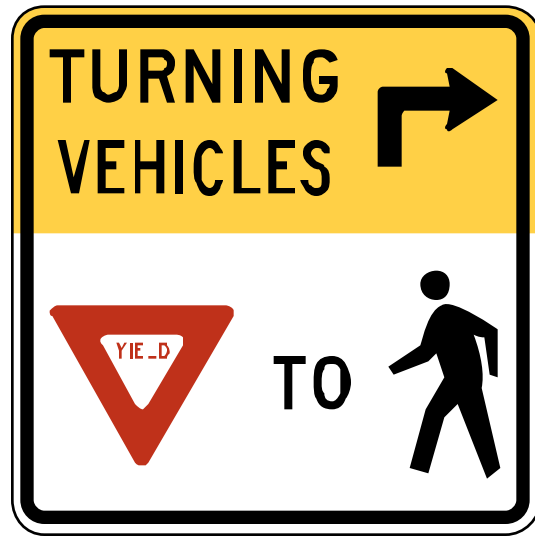
**For optional use
with new flashing
red arrow signal
faces**

**New optional
sign to remind
RTOR drivers to
yield to
u-turners**





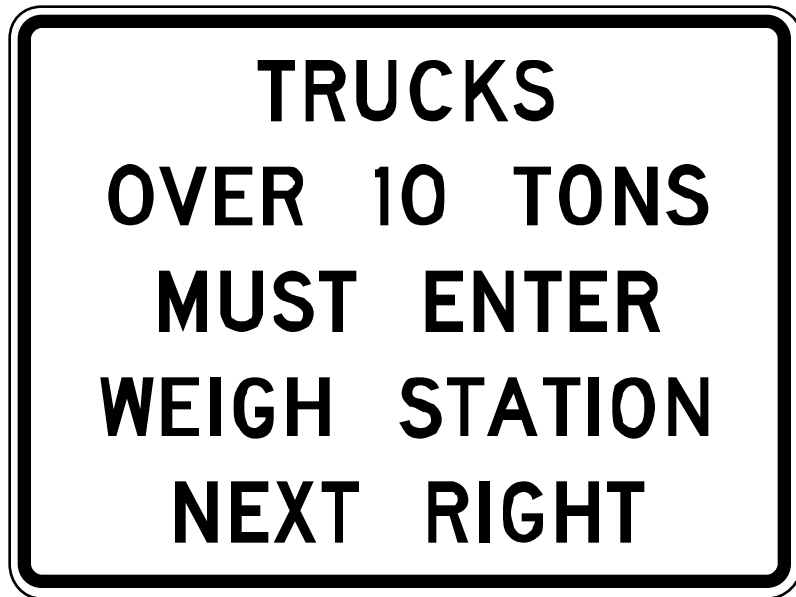
**For approaches with more than
one right-turn lane**



R10-15



**New symbolic design
for the R10-15 sign**



**Revised
legend for
weigh station
regulatory
sign**

Headlight use signs

LIGHTS
ON
WHEN
RAINING

LIGHTS
ON WHEN
USING
WIPERS

TURN ON HEADLIGHTS
NEXT 15 MILES

TURN ON
HEADLIGHTS

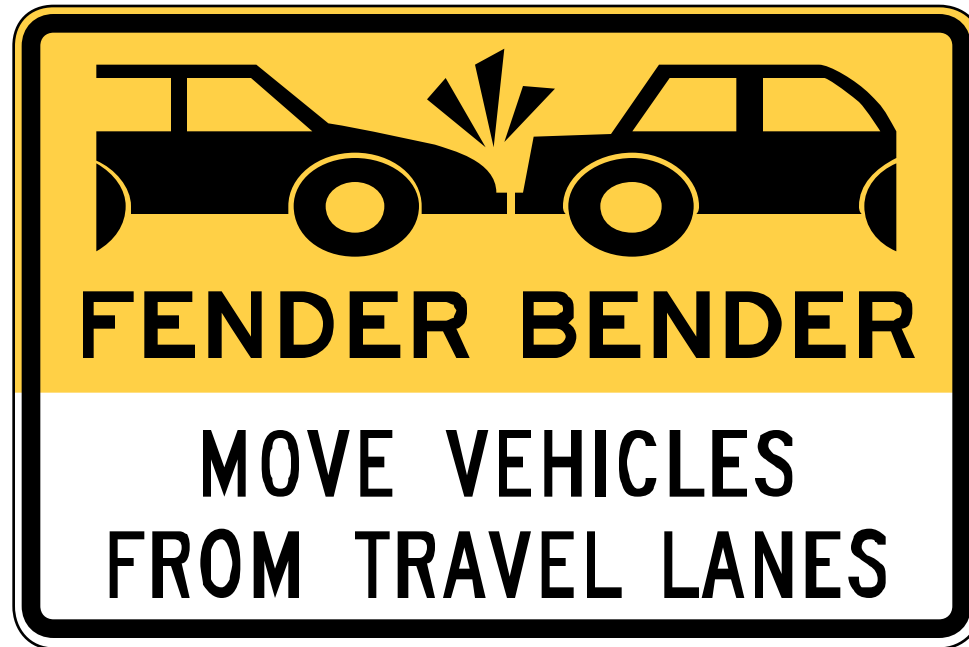
TURN OFF
HEADLIGHTS

CHECK
HEADLIGHTS

BEGIN DAYTIME
HEADLIGHT SECTION

END DAYTIME
HEADLIGHT SECTION

Incident management “Move-it” law sign



Revisions to Chapter 2C – Warning Signs



**Some word message
signs are being
deleted**



Also---STOP AHEAD, YIELD AHEAD, SIGNAL AHEAD

Fluorescent Yellow-Green color

Recommended for pedestrian, bike, and playground signs



Required for school signs



**36'' x 36'' Minimum size for all
diamond-shaped warning signs
on multi-lane conventional roads**



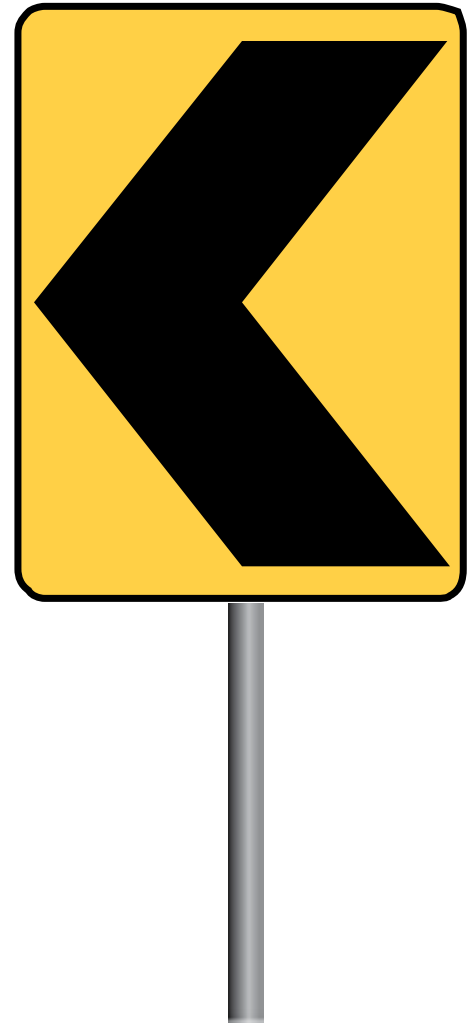
New table for selection of horizontal alignment signs

Type of Horizontal Alignment Sign	Difference Between Speed Limit and Advisory Speed				
	5 mph	10 km/h or 10 mph	20 km/h or 15 mph	30 km/h or 20 mph	40 km/h or 25 mph or higher
Turn (W1-1), Curve (W1-2), Reverse Turn (W1-3), Reverse Curve (W1-4), and Winding Road (W1-5) (see Section 2C.07 to determine which sign to use)	Recommended	Required	Required	Required	Required
Advisory Speed Plaque (W13-1P)	Recommended	Required	Required	Required	Required
Chevrons (W1-8) and/or One Direction Large Arrow (W1-6)	Optional	Recommended	Required	Required	Required
Combination Horizontal Alignment/Advisory Speed (W1-1a, W1-2a) at beginning of curve	—	—	Optional	Optional	Recommended
Truck Rollover (W1-13) with Advisory Speed Plaque (W13-1P) on exit ramp	—	Optional	Recommended	Required	Required
Exit Speed (W13-2) and Ramp Speed (W13-3) on exit ramp	—	Optional	Recommended	Required	Required

New variations of combination horizontal alignment-intersection warning signs



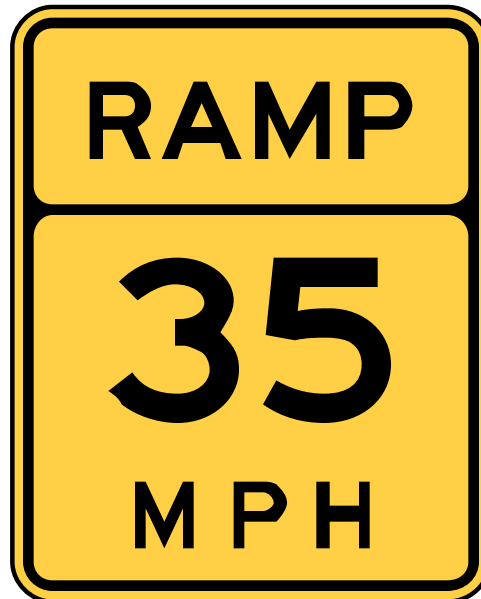
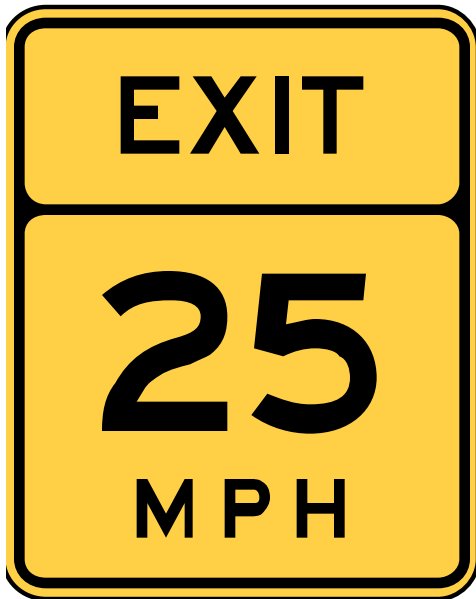
**Chevrons may
be mounted at
4' height**



New table for spacing of Chevron signs

Advisory Speed (mph)	Curve Radius (feet)	Sign Spacing (feet)
15 or less	Less than 200	40
20 to 30	200 to 400	80
35 to 45	401 to 700	120
50 to 60	701 to 1,250	160
More than 60	More than 1,250	200

Curve Speed advisory sign is being deleted



New combination horizontal alignment/advisory exit or ramp speed signs





New Freeway Ends and Expressway Ends signs



**New sign for use where a
freeway or expressway ends**



New Uneven Lanes or Shoulder Drop-Off sign and plaques



**UNEVEN
LANES**

OR

**SHOULDER
DROP-OFF**

**New
No Shoulder
warning sign**



New Falling Rocks sign and plaque



New signs and plaque to warn of conditions that primarily affect motorcyclists



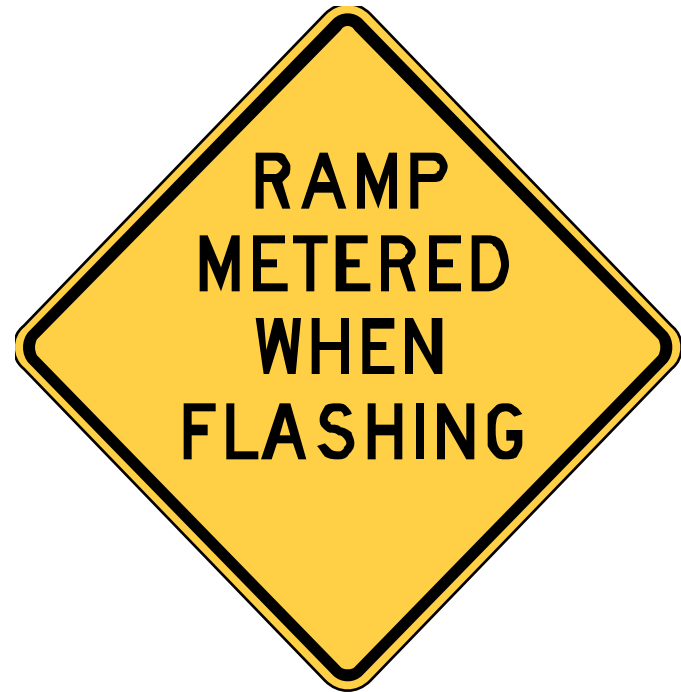
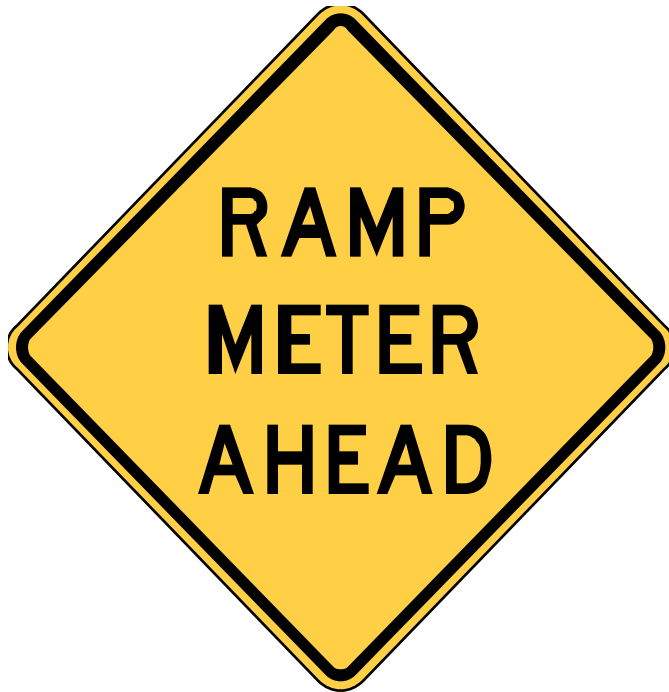
New warnings for adverse weather conditions



New warning signs for road flooding



Warning signs for ramp metering





**Speed Reduction
sign should be
used where the
speed limit ahead
is being reduced
by more than
10 mph**

Freeway lane drop advance warning



**RIGHT LANE
EXIT ONLY
AHEAD**

A rectangular yellow sign with a black border and rounded corners. The text is in bold, black, sans-serif capital letters, arranged in three lines: "RIGHT LANE", "EXIT ONLY", and "AHEAD".

Warnings of toll road ahead and tollbooth ahead

**TOLL ROAD
BEGINS
1 MILE**

**TOLL ROAD
BEGINS**

**PAY TOLL
1 MILE
CARS 75¢**

**STOP AHEAD
PAY TOLL
CARS 75¢**

New plaques related to toll roads

LAST EXIT BEFORE TOLL

PAY TOLL 1 MILE - CARS 75¢

STOP AHEAD - PAY TOLL

Two-Way Traffic warning sign variants for 3-lane roads



New plaque for circular intersection warning



W2-6



W16-12P

OR



W16-17P

Offset side roads and double side roads



New sign and plaque for combined pedestrian/bicycle crossing



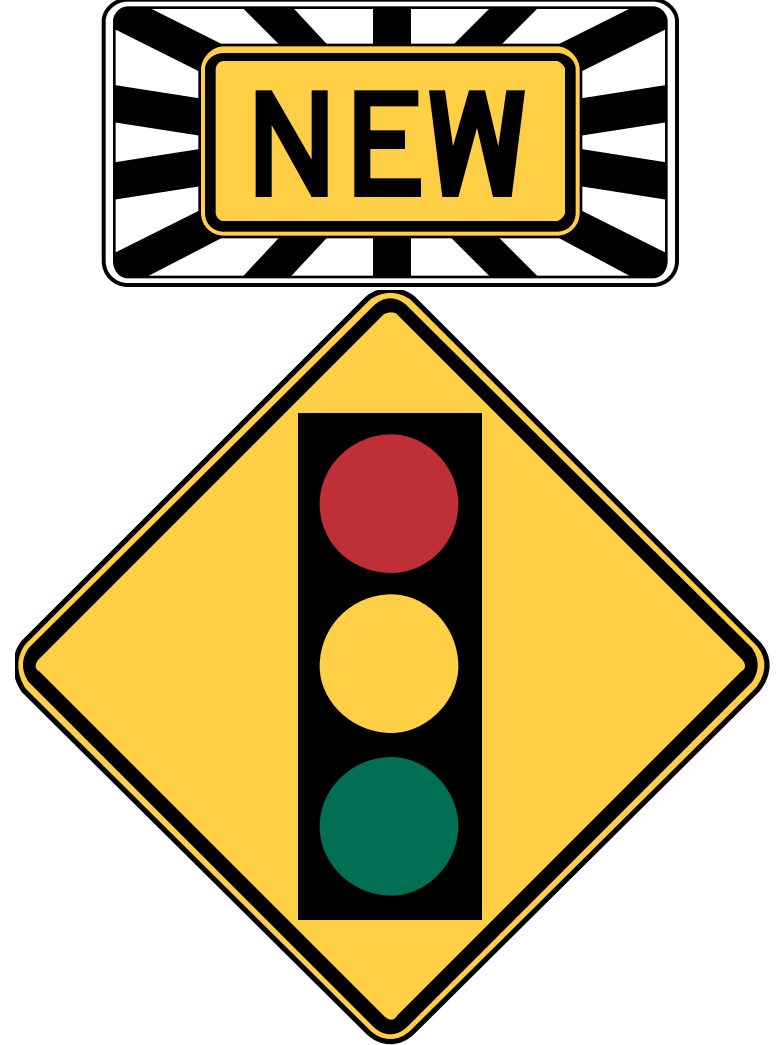
New symbol signs to warn of possible presence of large animals



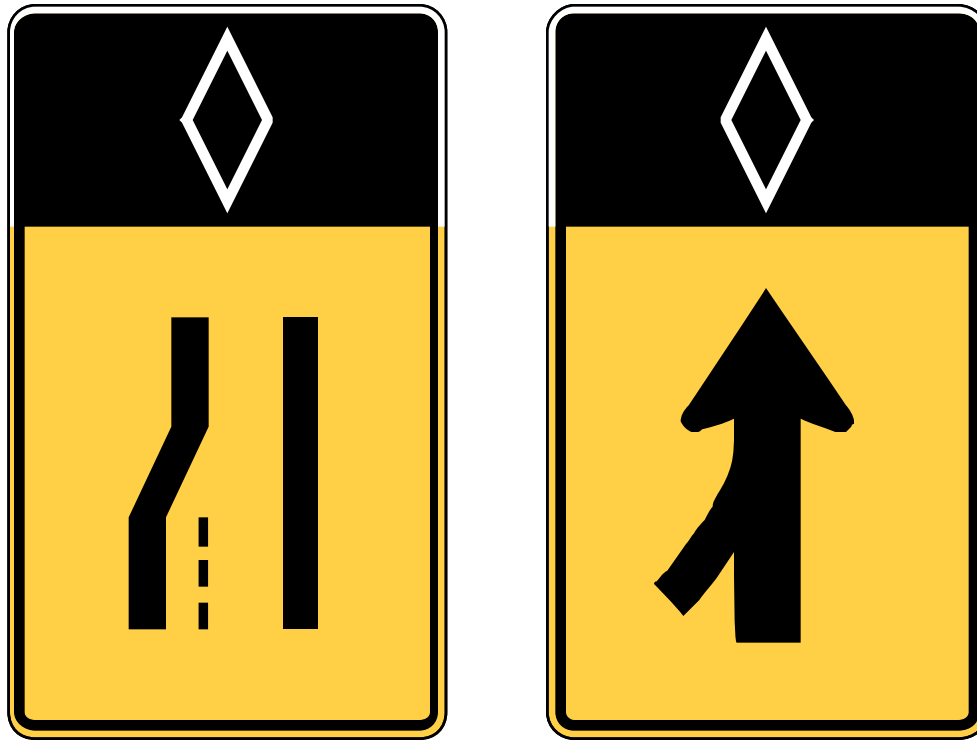
Warning of change in traffic pattern



**Plaque for new
regulatory sign
or advance
warning sign of
new regulation**



Median-barrier mounted preferential lane warning signs



**Recommended
order of 2
street names
on advance
street name
plaque**





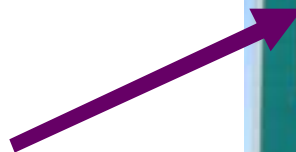
Plaques for use when STOP signs control all but one approach to the intersection

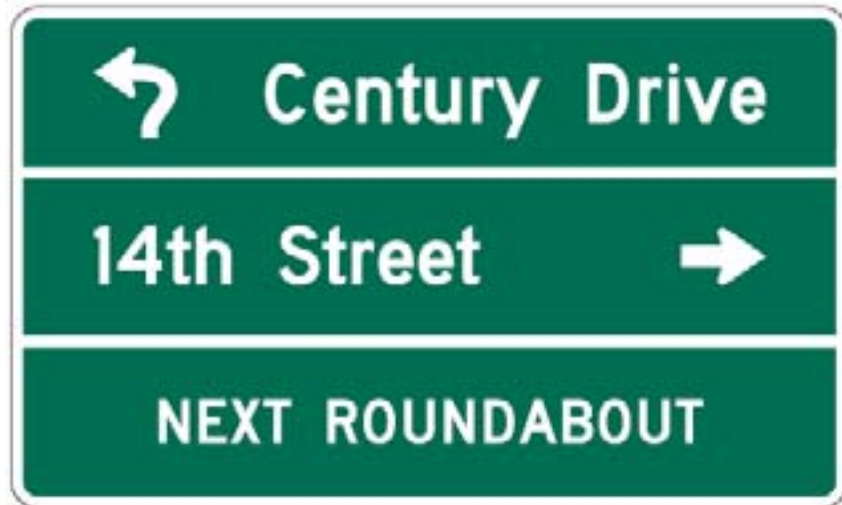
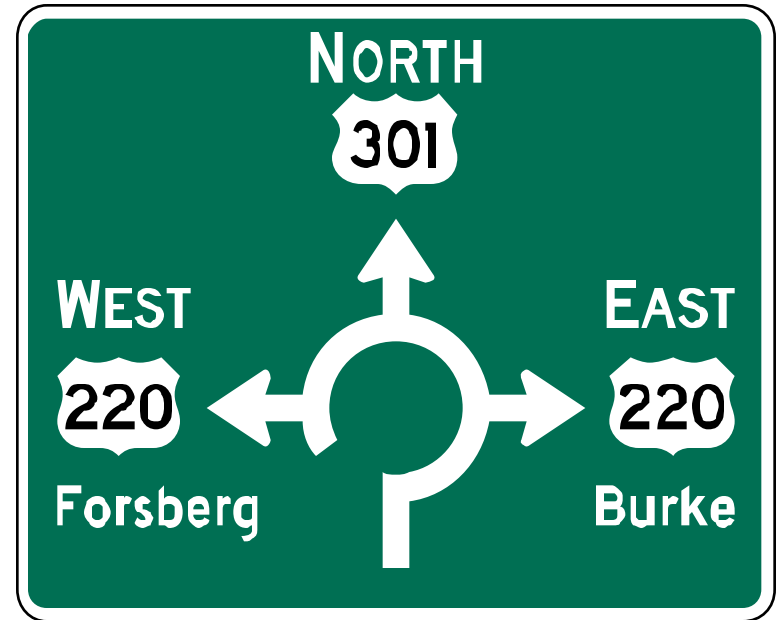
Revisions to Chapter 2D – Guide Signs for Conventional Roads

Provisions for use of pictographs on guide signs



Exceeds
max size





**New guide signs for
roundabouts**

Route and auxiliary signs combined on a green background



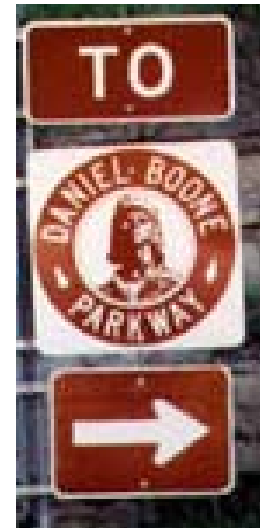
**For optional use above confirming
route sign at the start of a route**



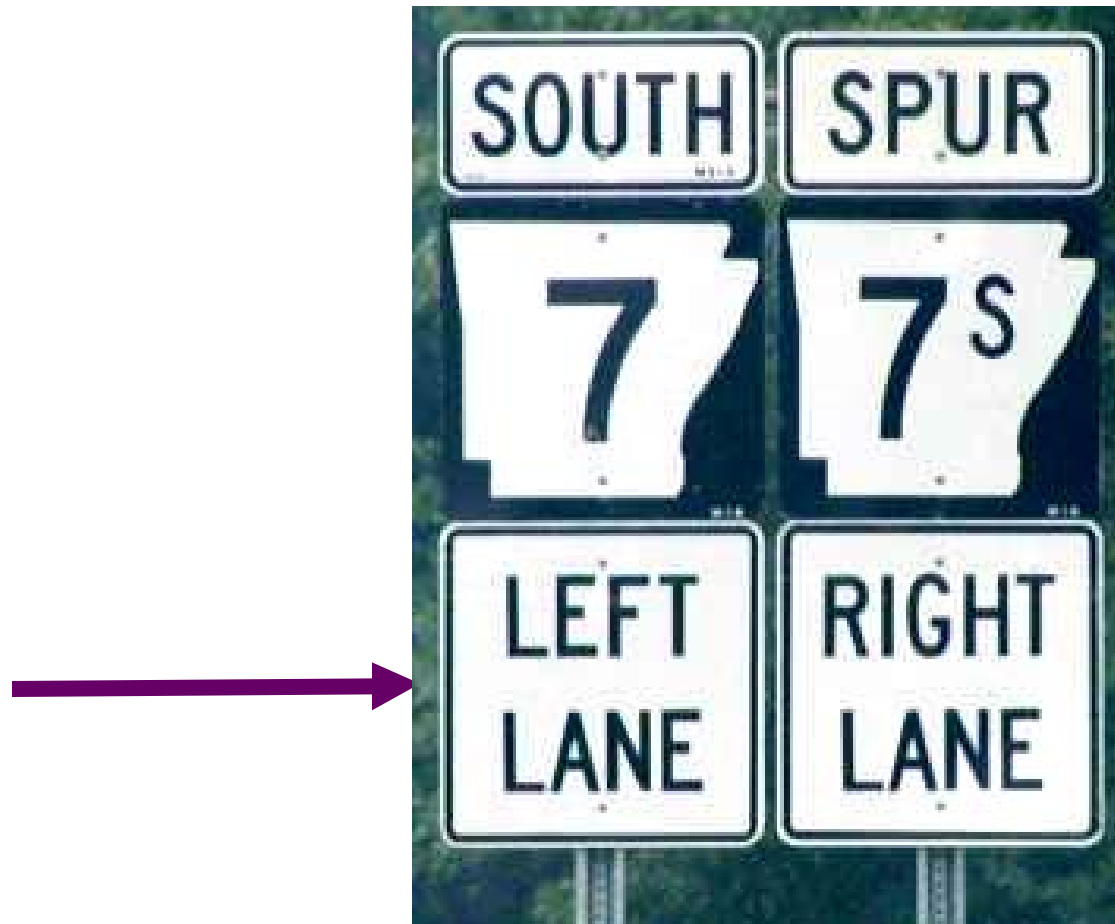
**New TOLL
auxiliary sign** →



Shields and trailblazer assemblies for named trails or un-numbered routes



Lane designation auxiliary signs





OR



Combination Lane-Use and Destination Overhead Guide signs



**Route shield may be used on a
street name sign**



New table for letter heights on Street Name signs

Type of Mounting	Type of Street or Highway	Speed Limit	Recommended Minimum Letter Height	
			Initial Upper-case	Lower-case
Overhead	All types	All speed limits	300 mm (12 in)	225 mm (9 in)
Post-mounted	Multi-lane	More than 60 km/h or 40 mph	200 mm (8 in)	150 mm (6 in)
Post-mounted	Multi-lane	60 km/h or 40 mph or less	150 mm (6 in)	113 mm (4.5 in)
Post-mounted	2-lane	All speed limits	150 mm* (6 in)	113 mm* (4.5 in)

* On local 2-lane streets with speed limits of 40 km/h or 25 mph or less, 100 mm (4 in) initial upper-case letters with 75 mm (3 in) lower-case letters may be used.

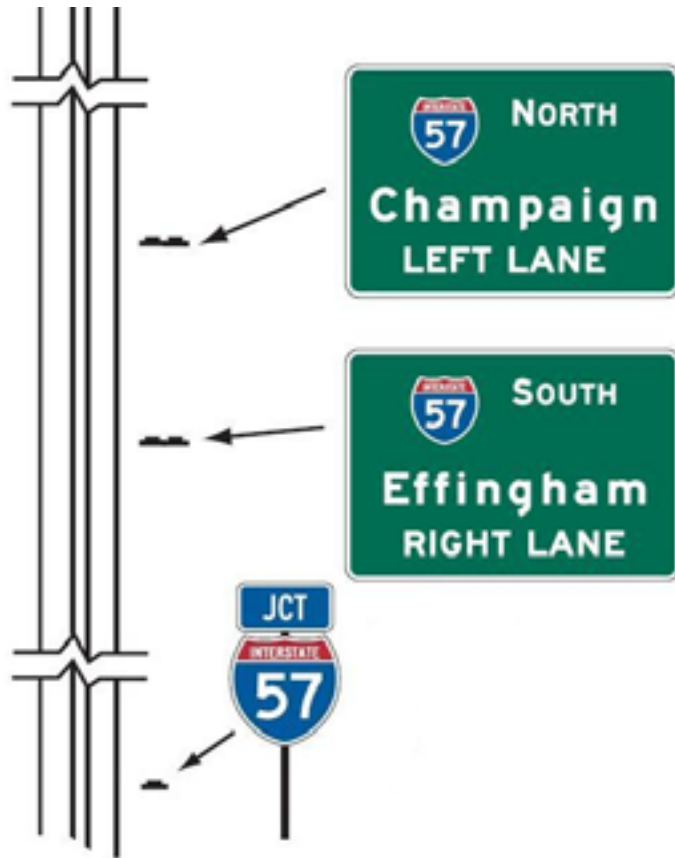


Only alternatives to **green**
Street Name sign background
color will be **blue**, **brown**, or **black**

Recommended order of 2 street names on advance street name sign



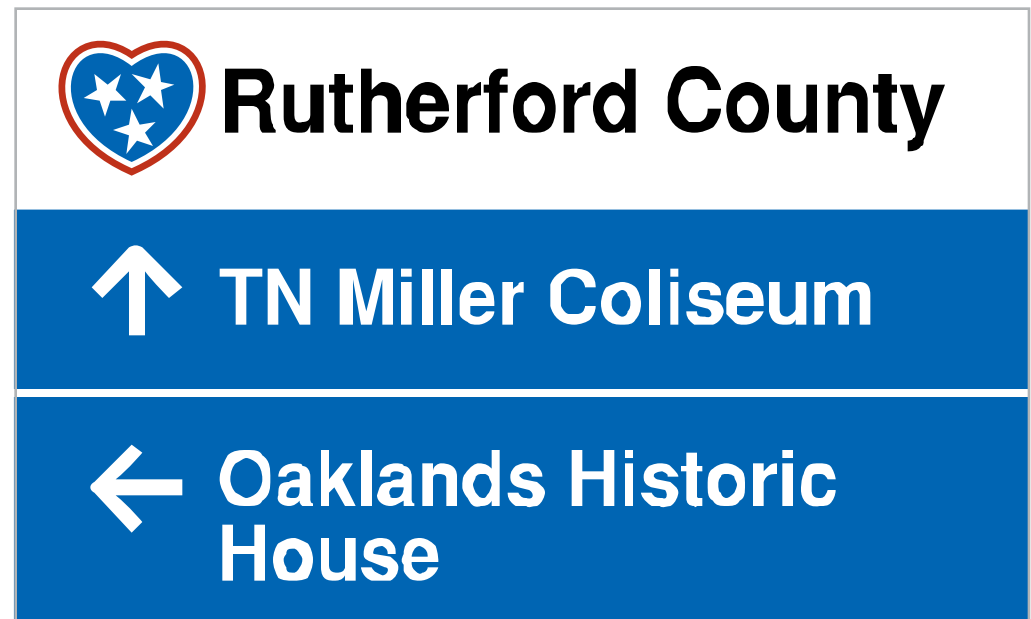
On multi-lane conventional road approaches to interchanges, guide signs identifying the direction of turn or lane to use for each ramp shall be provided



**New alternative
parking
wayfinding sign**



New provisions on the design and use of community wayfinding signs





**Guide signs for
truck lanes,
passing lanes,
and climbing
lanes**

Slow vehicle turn-out advance guide sign



Revisions to Chapter 2E – Guide Signs for Freeways and Expressways

**Down arrows shall always be vertical
and positioned directly over the approx.
center of each applicable lane**





LEFT plaques required for
numbered and un-numbered
exits to the left

Significant revisions on diagrammatic sign design and use



Lane lines on arrow shaft
-- too subtle!



New diagrammatic signs required for “option-lane” exits and splits and will feature an up arrow over each lane



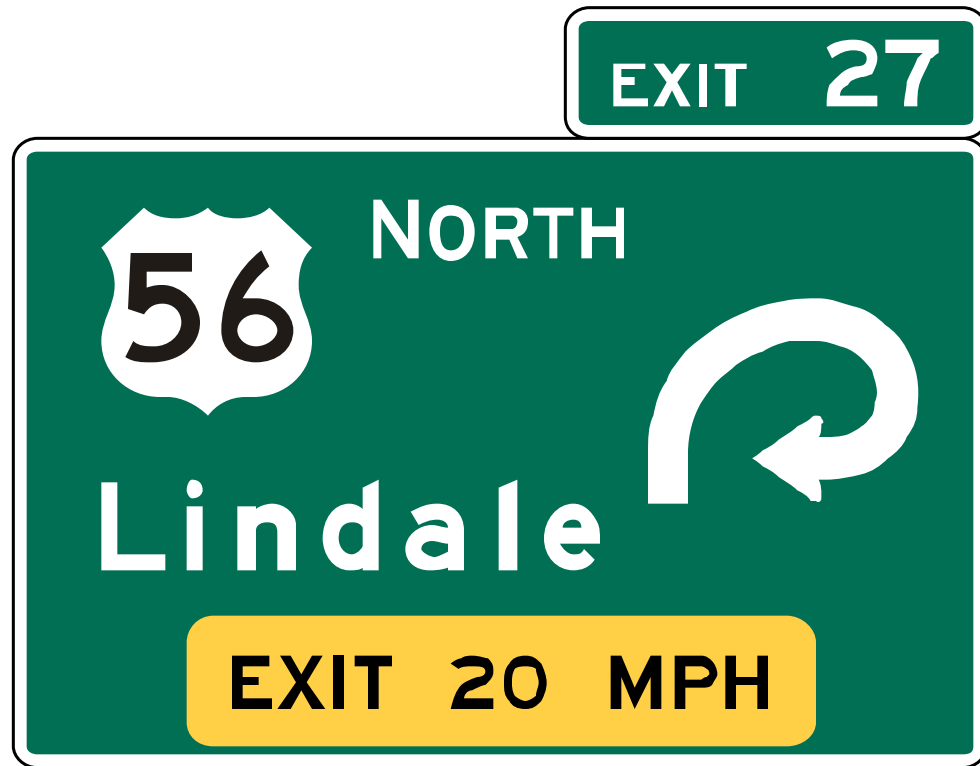


**For lane drops without an
“option lane”, EXIT ONLY panel
with down arrow(s) required on all
overhead advance guide signs**



**For lane drop without
“option lane”, Exit Direction sign
shall have EXIT ONLY panel with
upward diagonal arrow**

An advisory speed legend may be added to an Exit Direction sign



New requirement for exit numbering by reference location

EXITS 33 A-B

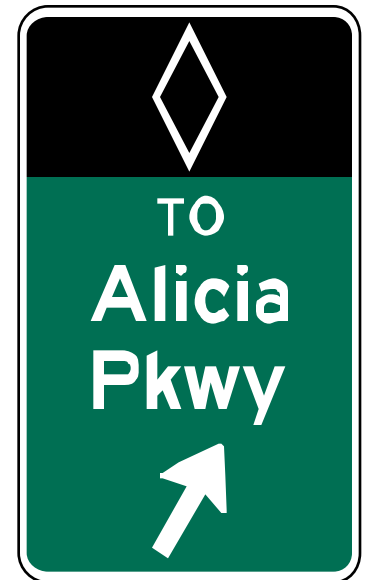
**Space required between
number and letter**



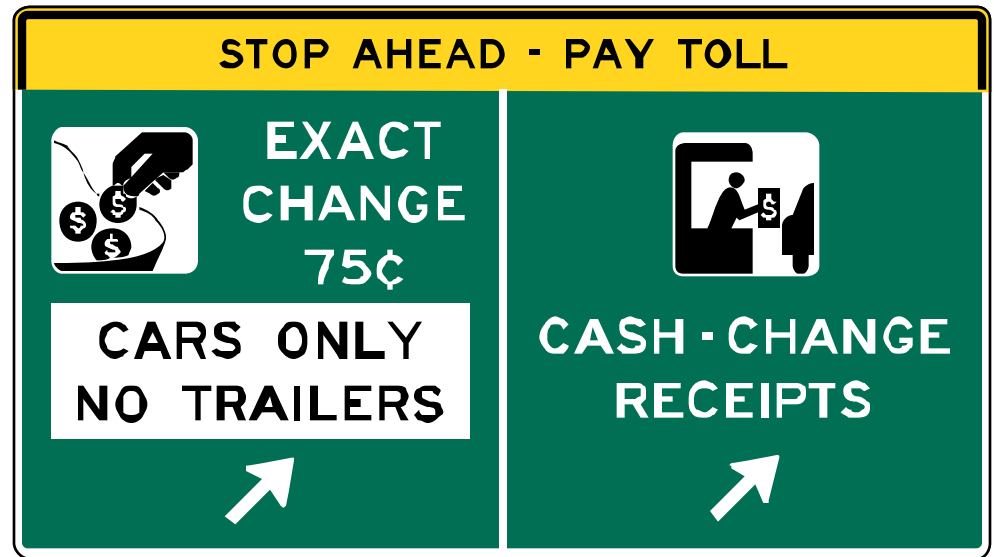
**Type 1
object markers
may be used on
exit gore
sign supports**

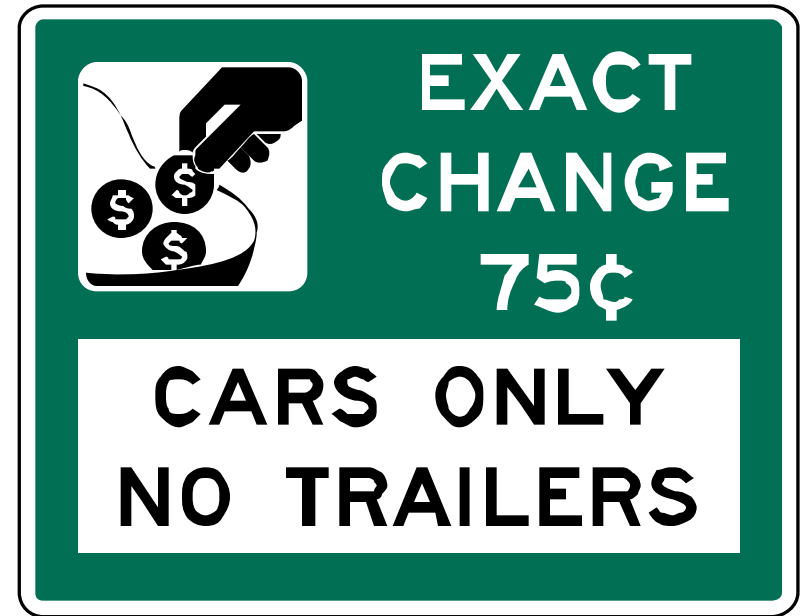


New guide signs for preferential lanes



Guide signs for toll plazas and open-road ETC lanes





**New guide signs and
symbols for toll plaza
canopies**

New symbol identifying nationally interoperable ETC systems, for future use





**New guide signs for managed
and ETC-only facilities**

Revisions to Chapter 2F – General Service Signs

(relocated from Chapter 2E)

General Service signs now in separate Chapter



New general service signs

Telecommunic.
device for the
deaf

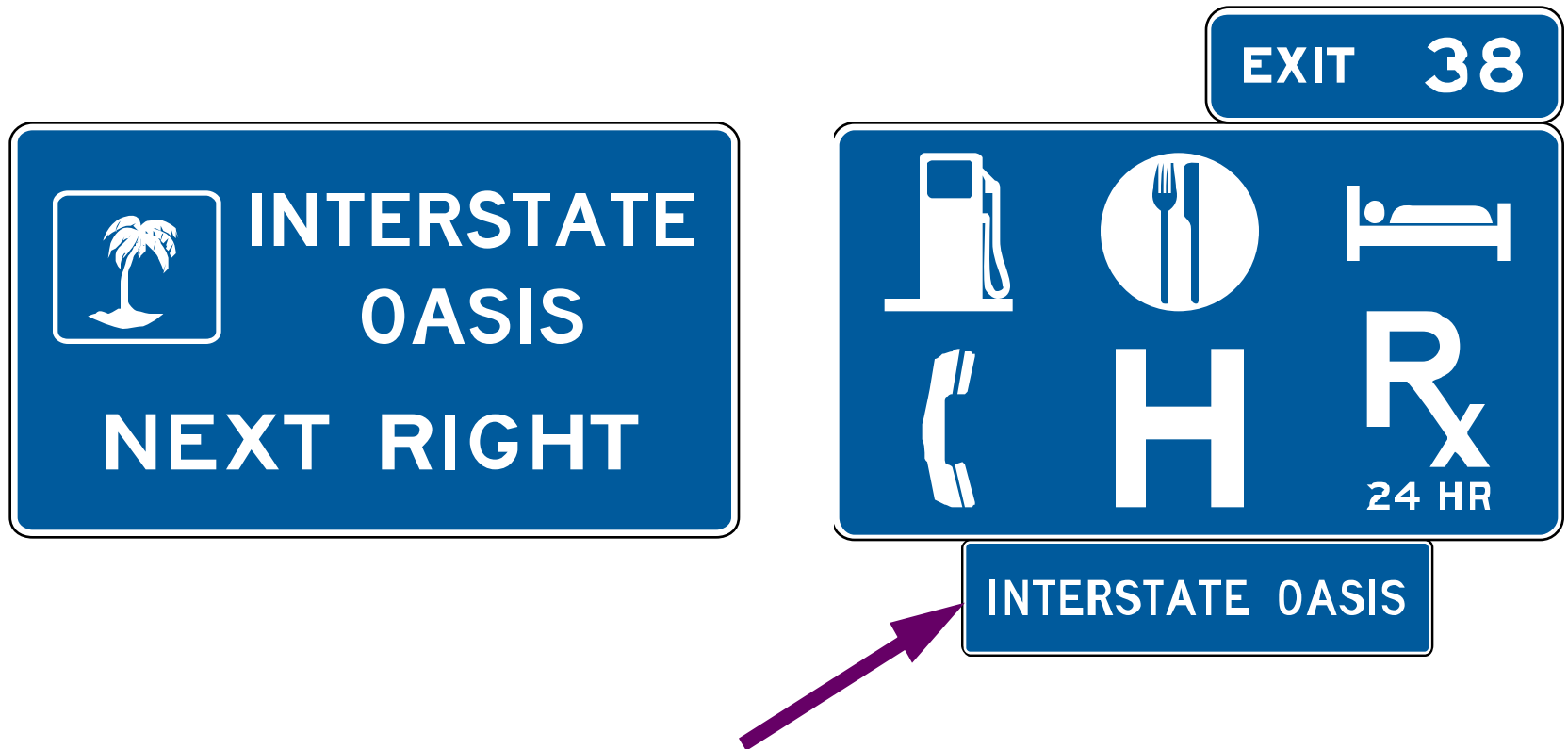


Wireless
internet



**Revised
general service
signs**

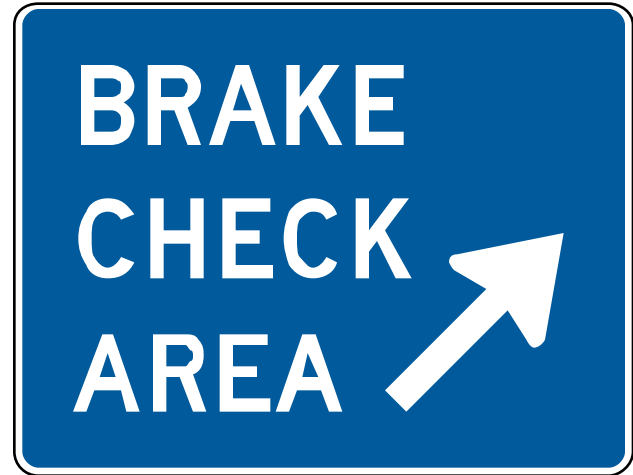
Interstate Oasis signing



“Dial” changed to “Call”



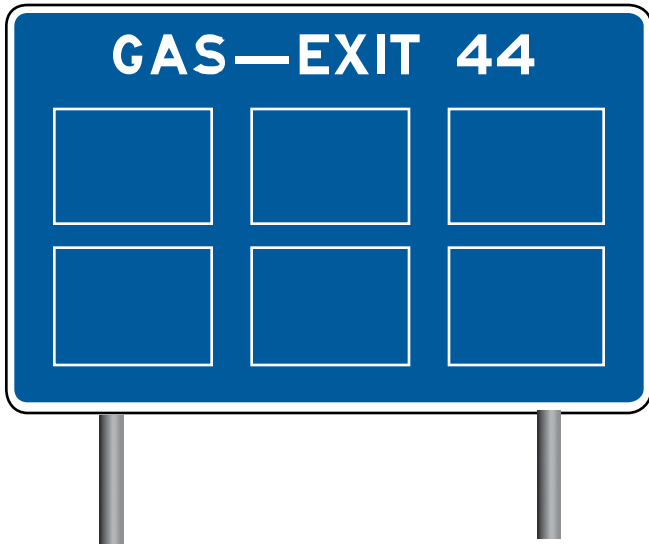
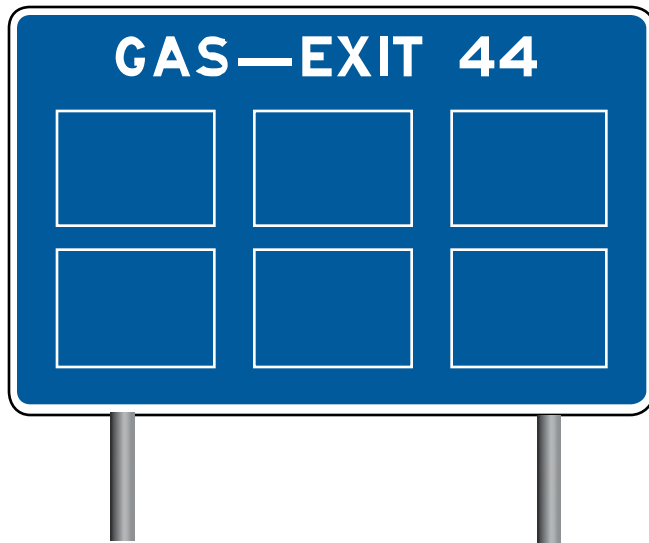
Brake Check Area and Chain-Up Area signs



These signs are being changed from warning signs to general service signs

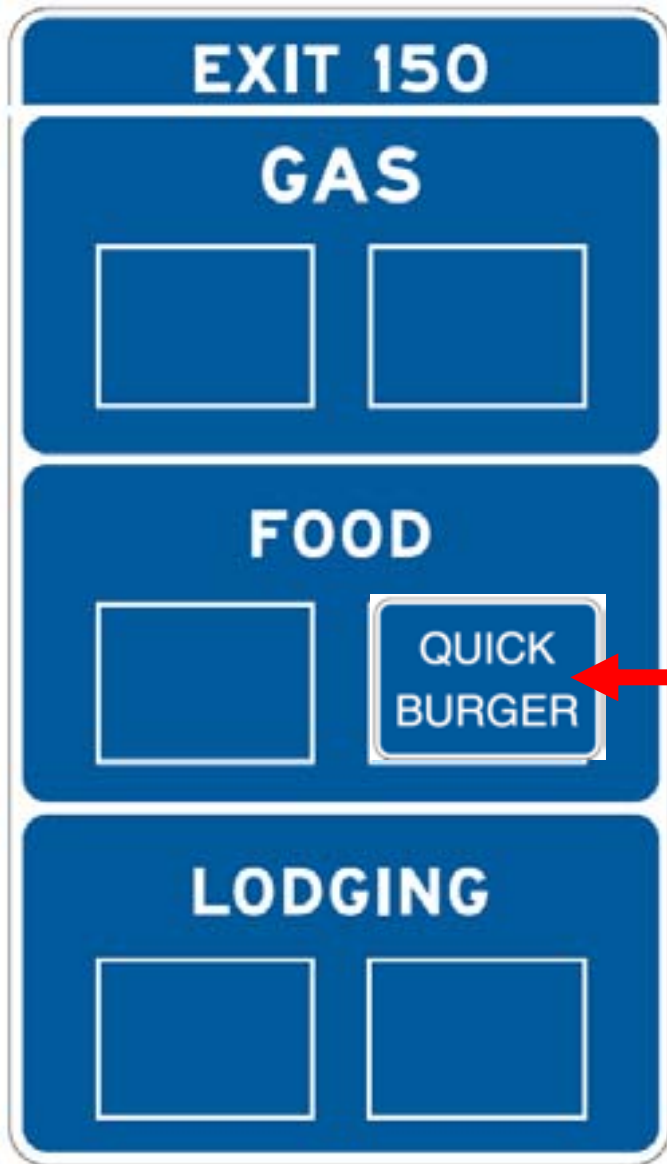


**Revisions to
Chapter 2G –
Specific Service Signs
(formerly Chapter 2F)**



**12 logos on two
signs allowed for
one service type
at an interchange**

Recommended minimum letter heights for word-message logo panels



- 8 inch letters for freeways/expressways
- 6 inch letters for ramps and conventional roads

Supplemental messages and new RV-accessible symbol allowed within logo sign panels



Dual-logo sign panels for two businesses in a common facility



Specific service trailblazer signs



**NO Significant Revisions
to**

**Chapter 2H –
Tourist-Oriented
Directional Signs**

(formerly Chapter 2G)

New Chapter 2I – General Information Signs

New Chapter with sections relocated from Chapters 2D and 2E

- **Reference location signs**
- **Traffic signal speed sign**
- **Other I-series general information signs**
- **Memorial signing**
- **Trail signs**
- **Acknowledgement signs**

**Size of this sign is being increased
from 12" x 18" to 24" x 36"**



**Changeable message element allowed
for varying progression speed**

New Ferry Terminal sign for I-series



New provisions on the design and use of acknowledgement signs



Revisions to Chapter 2J – Recreational and Cultural Area Interest Signs

(formerly Chapter 2H)

Updated and expanded set of recreational and cultural symbol signs





**Recreational
and cultural
interest area
prohibitory
signs**

Revisions to Chapter 2K – Emergency Management Signing

(formerly Chapter 2I)

Tsunami Evacuation Route sign



New option for fluorescent pink background when EM-6 or EM-7 signs are used in an incident situation



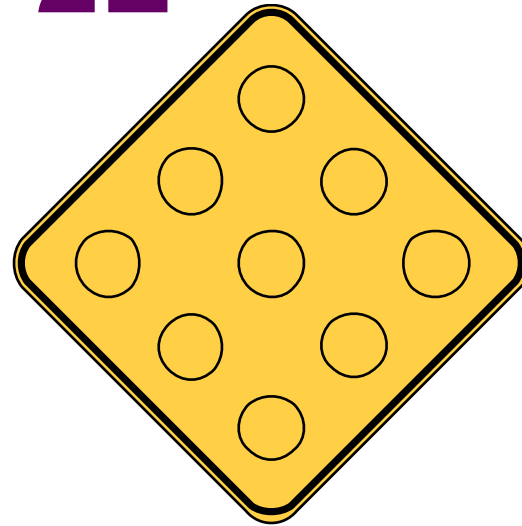
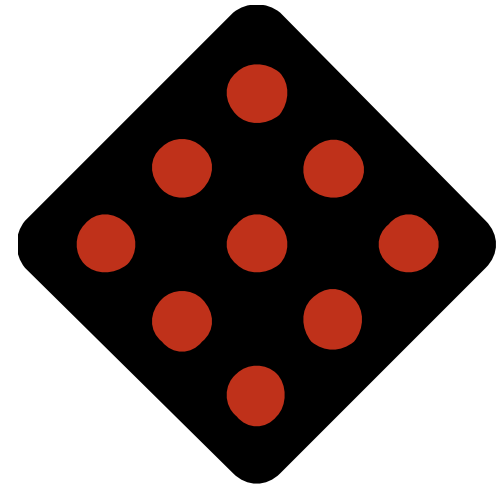
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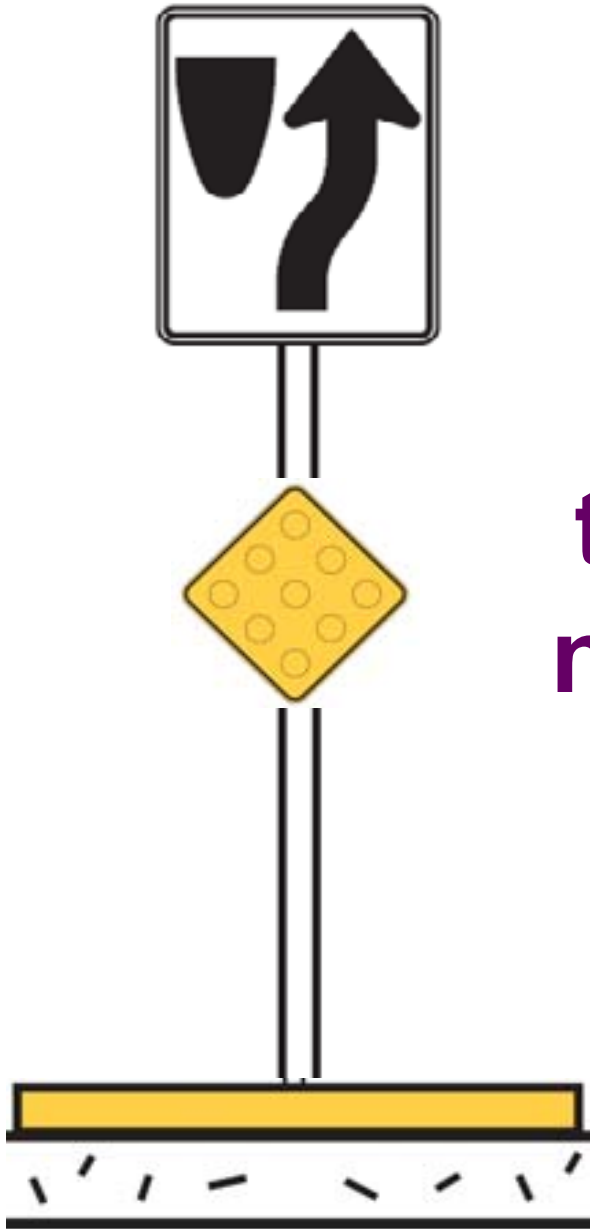


Revisions to Chapter 2L – Object Markers and Barricades

(formerly Chapter 3C and Section 3F.01)

**Object markers and
barricades are
being relocated
from Part 3 to
new Chapter 2L**





**Option to use type 1 or
type 3 object marker on
nose of median island at
intersection**

New Section on traffic gates



New Chapter 2M – Changeable Message Signs

Provisions for Changeable Message Signs

- Legend Height
- Color
- Phases per Cycle
- Display Time

